# Print Station
# Standard Operating Procedure

## Printing:

Access all publications at http://publications.decagon.com, where you may view a list of all Decagon publications–Quick Starts, Inserts, Stickers, Manuals, Covers, all print items. Should you discover any print items not located in the git repository, contact the Archivist to determine if Decagon should print the item in house. The Print Station benchtop PC Internet homepage is http://publications.decagon.com. Simply open the PC Internet browser to access the repository.

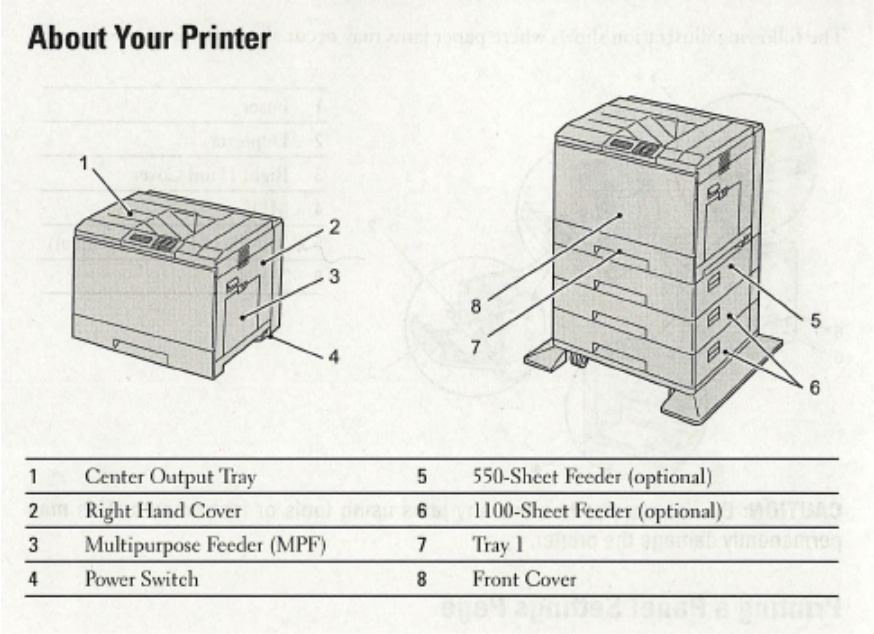
All file names have the product number first, an underscore, the product name, another underscore, and, if required, the web or print notation. Many files have two versions in the online repository, a "print.pdf" and a "web.pdf," while all other files – Covers, Quick Start guides, Integrator guides, and Inserts have only one print file "print.pdf." Always select the "print.pdf" to print at the Print Station

Each product has a designated folder in the repository. i.e. All manual covers printed in house will be in the "Covers" folder and you can download and print them on demand. Quick Start Guides, Integrator Guides, Inserts, and Application Notes, etc. all have their own folders in the online repository. Download and save the "print.pdf" file to the "Print Manuals" folder on the Print Station PC desktop and open in Adobe Acrobat to print.

*Note: Do not print from previously saved copies, always pull print manuals from the repository at http://manuals.decagon.com to ensure you have the most up to date item.*

MarCom formats all print files for production printing. Print to "actual size," "double-sided," and with "collate" checked to print materials correctly. (See Figure 2) Print all other materials according to individual specifications, though every item should be printed to "actual size."

*Note: Periodically check for print errors during every print run to catch them before too many have printed.*



## About Your Printer



| | | | |
|---|---|---|---|
| 1 | Center Output Tray | 5 | 550-Sheet Feeder (optional) |
| 2 | Right Hand Cover | 6 | 1100-Sheet Feeder (optional) |
| 3 | Multipurpose Feeder (MPF) | 7 | Tray 1 |
| 4 | Power Switch | 8 | Front Cover |

Figure 1: Printer Components

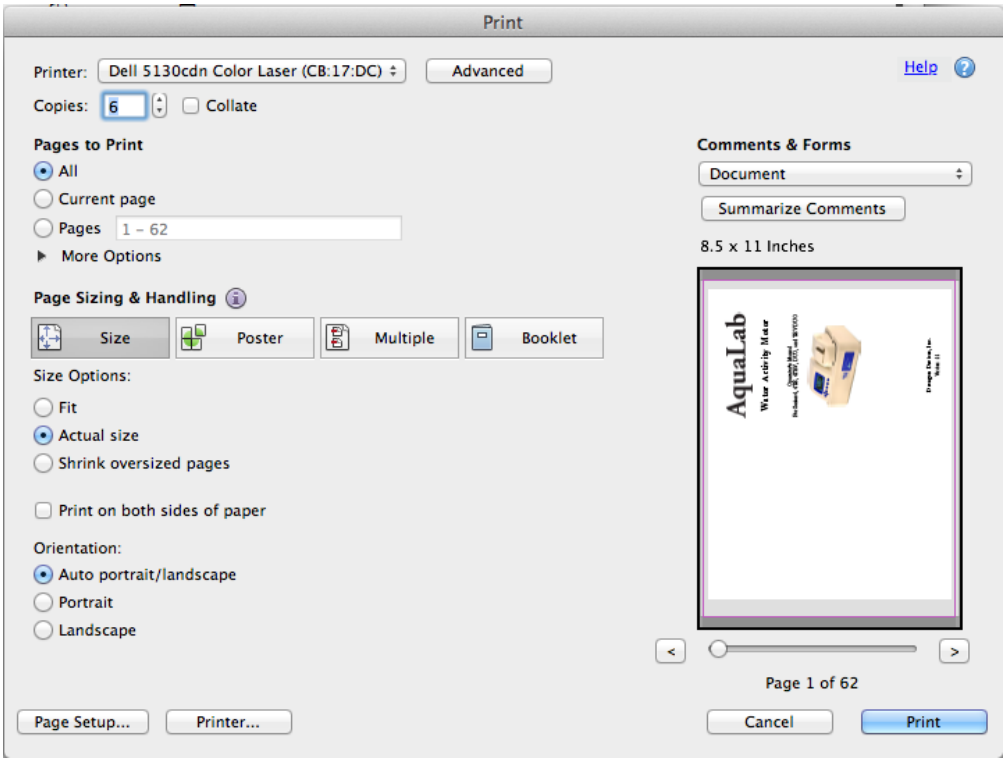
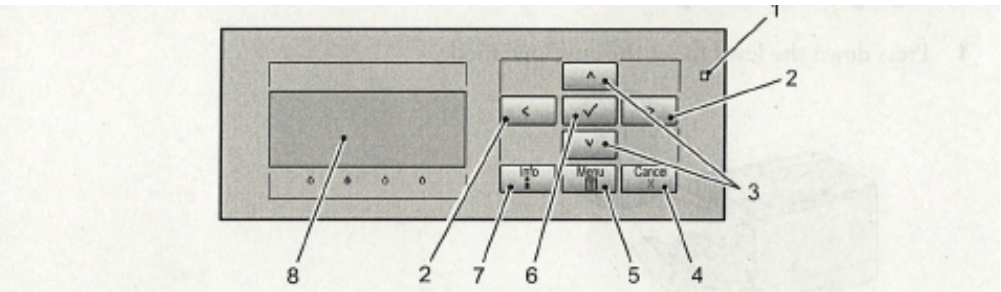



Figure 2: Print Screen Window




| | | |
|---|---|---|
| 1 | Ready/Error indicator | • Green: Printer is ready.<br>• Yellow: An error has occurred.<br>• Yellow and blinking: An unrecoverable print error has occurred. |
| 2 | < > buttons | In the Menu mode, selects submenus or setting values. |
| 3 | ∨ ∧ buttons | In the Menu mode, scrolls through menus or items. |
| 4 | Cancel button | Cancels the current print job. |
| 5 | Menu Button | Switches between the Menu and the Print mode. |
| 6 | ✓ (Set) Button | In the Menu mode, displays the selected item and determines the selected value. |
| 7 | Information button | When the information mark is displayed on the screen, press this button to view more detailed information. |
| 8 | LCD panel | Displays the printer status and messages. |

Figure 3: Printer Control Pad

**Printing Troubleshooting**

Replacing Toner Cartridges

Follow the instructions listed on the *Setting Up Your Printer Illustrated Guide* to install cartridges and drums. Recycle all cartridges and drums through Dell's recycling program. There are instructions and materials for recycling print consumable items in the packaging of new cartridges and drums and in the 5130cdn Printer File located at the Print Station. Replace toner waste basket and feeding belt according included instructions.

Paper Jams

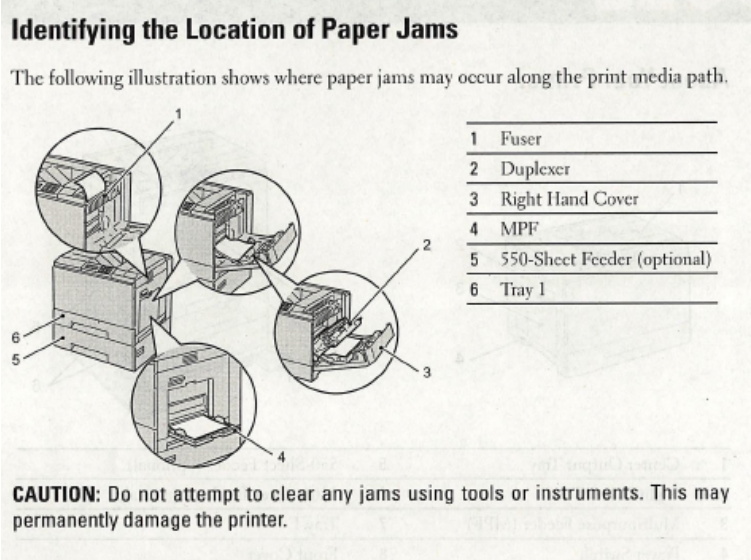

Identifying the Location of Paper Jams
The following illustration shows where paper jams may occur along the print media path.
1 Fuser
2 Duplexer
3 Right Hand Cover
4 MPF
5 550-Sheet Feeder (optional)
6 Tray 1
CAUTION: Do not attempt to clear any jams using tools or instruments. This may permanently damage the printer.

Figure 4: Check for Paper Jams

Print Drivers

Printer should operate on DELL PCL6 Driver.

For Bleeds and Color Smears

1. First, use the cleaning rod attached to the interior of the printer cartridge door to clean off excess materials per the instructions in the User Manual.
2. If color bleed continues, print a contamination check page from the printer service menu. To access the service menu, turn off the printer, hold the up and down arrows on the printer selection pad, and then turn the printer on again. The printer screen should enter a service menu. Select contamination check from this service menu or use the other menu options to check functionality.
3. Remove and clean the feed belt and general interior components.
4. If contamination check still shows bleed marks after cleaning, then evaluate the drum life. Each print drum should last for 50,000 pages, black cartridges should print 18,000, and color cartridges will vary, though Dell rates them to last 12,000 pages.
5. If problems persist, contact Dell Support.

Color Cartridge Changes

The printer will notify you when the cartridge requires replacement.

Text Misalignment or Margin Creep

1. Sometimes not setting the paper in the tray precisely leads to margin creep that can result in uneven margins. Fortunately, there is a relatively simple solution.

2. Open the feed tray and remove all of the paper, ensure the stack is even and uniform, and that there are no paper jams. Place the paper stack into the feeder and confirm that both width and length braces are snug and securely set.

If you find any defective cartridges or parts, while substantially under their lifetime page counts, remember we have a four year warranty and maintenance contract. Please use the warranty in cases where the printer does not meet standards and Dell repairs or replaces printer components at no cost to us. Call (800)456-3355 and use the Express Service Code # 10616768209 to contact Dell customer support or to initiate warranty repairs.

# Cutting:

### Precision Cutter

The precision cutter is very simple to use and is handy for cutting the smaller stickers and inserts that we often find at the Print Station. Only cut to primary specifications listed in Figure 6.

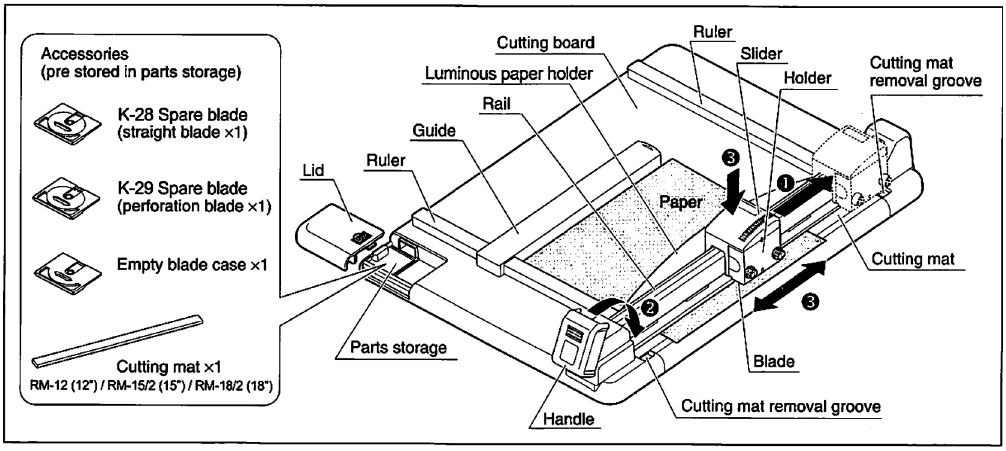



Figure 5: Primary Components

| | | DC-210N | DC-220N | DC-238N |
|---|---|---|---|---|
| Cutting Capacity | Straight Blade*1 | 36 sheets of paper<br>Approx. 64g/m² of PPC paper in 2 return-trip cuts | | |
| | | Cardboard (Up to 1 mm), Soft Vinyl (Up to 0.8 mm), Hard Vinyl (Up to 0.4 mm), PP film (Up to 0.4 mm) | | |
| | Perforation Blade*2 | 3 sheets / cut in one direction only*3 | | |
| Cutting Length | | 12 1/4 in | 14 3/4 in | 18 in |
| External Dimensions | | W14 3/16 in x L19 1/4 in x H3 5/32 in | W14 3/16 in x L21 5/8 in x H3 5/32 in | W14 3/16 in x L24 in x H3 5/32 in |
| Weight | | 6 lbs. | 6.6 lbs. | 7 lbs. |

Figure 6: Specifications

### Precision Cutter Troubleshooting

Review the figures below for repairing and replacing common consumable parts.

## Replacement of Cutting Mat

**If the cutting mat's groove becomes deep, will not be able to cut as cleanly. In such cases, turn over, switch over sides, or replace the cutting mat with a new one.**

❶ Remove by raising the edge of the cutting mat from the cutting mat removal groove.

❷ Turn over the cutting mat or switch over sides. By switching over the right and left side of the cutting mat or turning it over, it can be used a total of 4 places.

❸ After using the cutting mat in 4 places, replace it with a new one.

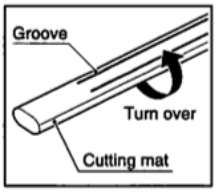



Figure 7: Replacement of Cutting Mat

## Replacement of Blade

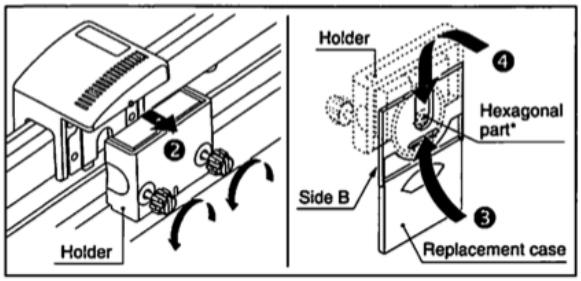
**If you are unable to cut as cleanly due to the blade being worn out, please replace the blade.**

❶ Raise the handle.

❷ Remove the screws and take off the holder.

❸ Open the empty blade replacement case, place side B of the case together with theblade in the holder, and remove the blade.

❹ Place the blade in side B of the replacement case together with the hexagonal part of the holder, and attach the blade. (Use the new empty blade replacement case for the next blade replacement.)




* Cannot be removed from the holder.

**Do not touch blade edge directly. (Risk of Injury.)**

### ■ Setting of the Blade

- Set the spare blade so that the "MADE CARL JAPAN" stamp can be seen.
- When using a spare blade without the "MADE CARL JAPAN" stamp, set the blade, and then test cut with 10 or so sheets. If you see fine paper dust, please reverse the front/back of blade.

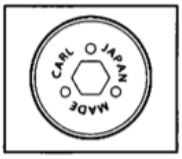



Figure 8: Replacement of Blade

The precision cutter has no warranty and should be used according to specifications to ensure a long life.

## Guillotine Cutter

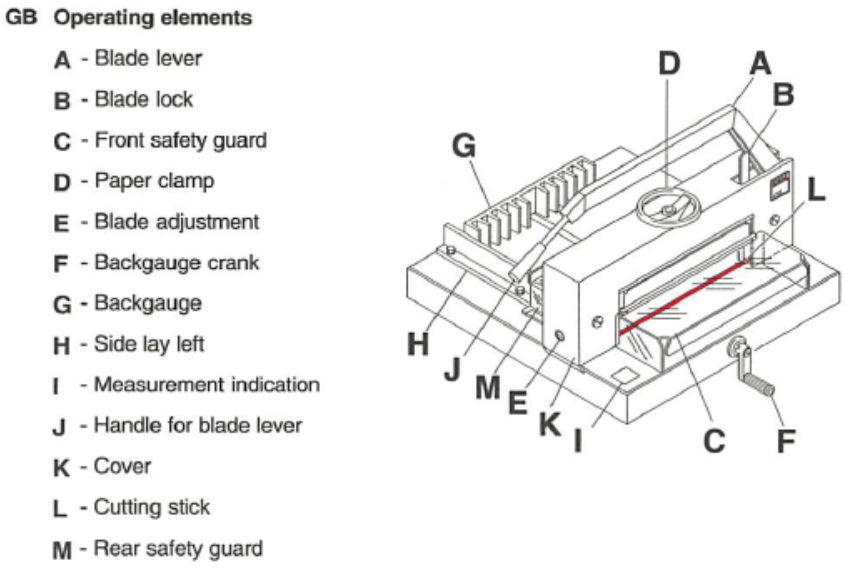



Figure 9: Ideal Components

Be sure to align the guillotine cutter precisely to make both the binding cuts and any finishing cuts to even out booklets. A precise cut requires that the paper holder is firmly holding the material and the black Side Alignment Guide is screwed tight to prevent movement. e.g. Align the Side Alignment Guide at precisely 5.5 inches from the blade to ensure a clean and accurate half cut for a typical 8.5 x 11 sheet of paper and for all booklet and spiral bound manuals. Pay attention to specific dimensions for all custom print jobs for stickers and inserts. Use the precision trimmer for non-typical cuts

All spiral bound manuals must be cut down the center and folded to bind. If the guillotine is uneven, then the final product will have rough edges on the outside or will be unevenly bound. You can always cut an unbound copy to be even before binding should the edges come out uneven. Remove excess blank pages at the end of the document

After stapling, cut booklets along the long ragged edges to remove any overlap or unevenness from folding and stapling.

## Guillotine Troubleshooting

Misalignment

1. Most problems with the Guillotine involve misalignment, cutting crooked, or cutting too much or too little. Operators can correct most of these issues with detailed attention to the placement of the Side Alignment Guide according to measurement indicator.
2. Measure alignment using the measurement indicator and place paper in center of cutting surface for all cuts.
3. If you align the blade and still notice the cutting is incorrect, you can adjust the blade by following the procedures outlined in the Operator's Manual.

Blade is not Cutting Cleanly through Paper

1. Rotate cutting base for a smooth cutting surface.
2. If the blade is not cutting through stacks adequately, then it may need to be sharpened or replaced. Refer to the Operator's Manual for instructions on repairing or replacing the blade.

## Scoring

The crease/perforation machine has a front and rear sliding stop, as well as an angular stop. Determine theposition of these with the millimeter/inch ruler at both sides of the machine. The composite bar has crease slots on one side and a softer perforating surface on the other, rotate the bar 180° to change from a wide crease to a narrow crease. Turn the bar up to the softer surface for perforations.

Score all folded card stock covers, quickstarts, and inserts. Use the short grain 80 lbs. paper for creasing and the long grain 80 lbs. paper for cutting. Score one item at a time to ensure a proper score and to prevent damage to the device.

- The CreaseMaster can score up to 750 pieces of paper or cardstock per hour.
- The CreaseMaster is compatible with many different sizes of paper. The smallest pieces it can handle is 5" x 1" while the largest can be up to 17" in long. You can use this device to score everything from typical 20 lb. bond paper as well as cardstock that has an 18 point thickness.
- This machine has 4 different scoring widths so you can get the right crease for your paper or cardstock. The widths are 0.5, 1.0, 1.5, and 1.8 millimeters. You can score your documents on either a 45 or 90 degree angle - just choose the setting that feels the most comfortable to you. Also, it performs both regular and inverted creases.
- Machine measures 30" (width) x 19.5" (depth) x 9" (height) and weighs less than 30 pounds.
- The CreaseMaster is very durable thanks to its solid steel construction. You are be able to get a lot of use out of it for years to come. Also, it comes with a 5-year warranty which is one of the most generous warranties you'll ever come across.

**Scorer Troubleshooting**

The "Graphic Whizard Model GW MCOSP Manual Crease and Perforation Machine" has a five year warranty that ensures we can repair or replace the scorer as needed. Contact Decagon's My-Binding.com representative Ashley Franta at 800-944-4573 to report damage and arrange for repairs.

## Laminator

Laminate items like Quick Starts and inserts according to the Description instructions in M3 and the Print Station Spreadsheet on the benchtop.

For Hot lamination, hold the "Hot/Cold" button for 1 second, the LCD display turns on, and

the hot mode icon flashes. The initial setting is 100 °C and a speed of six. Set the machine according to the lamination settings guide in Figure 10. When the machine is ready, the ready icon appears and it beeps three times.

The list below describes the machine settings, please refer to Figure 11 for the control layout and button functions.

- To increase or decrease temperature, use the up or down temp buttons.
- To laminate faster, use the UP or DOWN speed buttons
- To see current roller tempature, press MEAS
- To stop the rollers, press STOP

| Film Thickness (mil) | Paper | Without Carrier | | With Carrier | |
|---|---|---|---|---|---|
| | | Temp°C | Speed | Temp°C | Speed |
| 3 | Letter (20lb) | 100- 110 | 4- 7 | 120- 130 | 4- 5 |
| 5 | Letter (20lb) | 110- 120 | 5- 6 | 120- 130 | 3- 4 |
| 7 | Letter (20lb) | 115- 125 | 5- 6 | 130- 140 | 3- 4 |
| 10 | Letter (20lb) | 120- 130 | 4- 5 | 140 | 2- 3 |
| 14 | Letter (20lb) | 130- 140 | 3- 4 | 140 | 1- 2 |
| * If using a low temperature film, please decrease temp 15- 20°C.<br>* To avoid damaging the machine, please use recommended settings. | | | | | |

Figure 10: Lamination Settings Guide

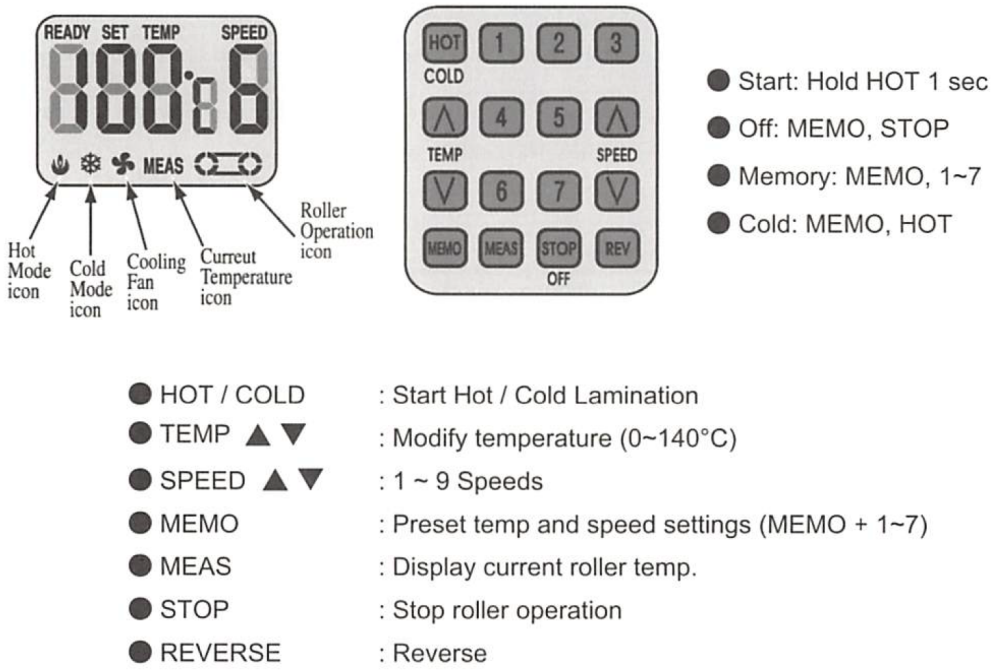



Figure 11: Control Panel Layout/Functions

## Binding:

Ensure that the document you are binding is an appropriate size for the wire spirals and that all settings on the machine are correct. Use the size guide on the machine to determine the correct size spiral bindings to use and the appropriate machine settings. Follow steps 1 through 4 to bind manuals.

1. Punch holes in your document at around 20 pieces of paper per punch, make sure to justify the paper and punch in consistent locations.

2. Then attach the wire binding to the Wire Snatch to place punched manual on binding.

3. Once you have threaded binding wire through holes, ensure the Master Selector is set according to the size of your manual and then place the manual binding edge down in the Wire Closer.

4. Pull the handle to close the Wire Closer and then view the finished product to ensure a good binding, adjust the Master Selector to get the perfect pitch and closure.

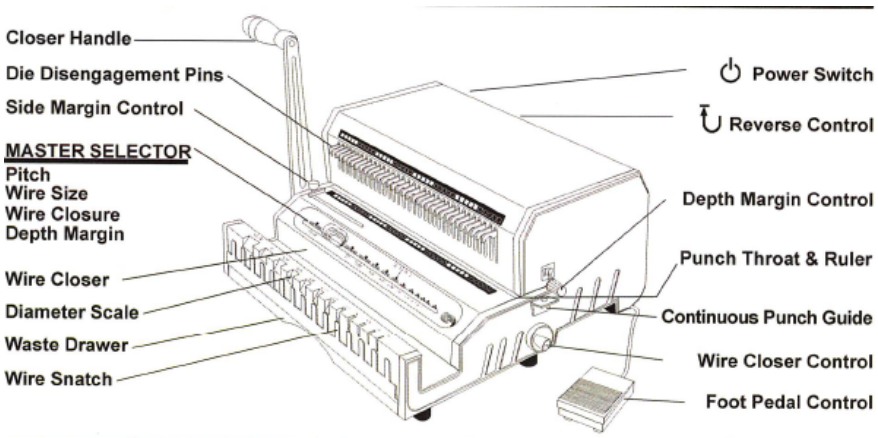



Figure 12: WireMac-E Components

**Binding Troubleshooting**

Binding is too Tight or Loose

Spiral wire is too tight or loose, causing pages to become stuck or to come out of binding all together. This is usually remedied by verifying the closing mechanism on the binder is set to close to the appropriate depth. If it is set correctly, then check the size of the spiral binding wires you are using to ensure they are adequate for your binding job.

Binding Holes do not Line Up

Adjust the hole punch with the Side Margin Control Adjustment. Unscrew the slide to loosen and then move it right/left to adjust the location of holes in the margin. Ensure that no hole is partially punched or hanging over the edges of the document.

## Saddle Stitching:

Fold booklet size documents, saddle stitch any manual under 20 pieces of paper or 80 booklet pages.

The saddle stitcher has the ability to use a variety of staples should production need to utilize it for larger quantities of paper or other material. However, we have found that the 1/4 inch staples will work well for saddle binding manuals comprised of 20 pieces of paper or less.

Line up booklets using the markings on the saddle stitcher to ensure staples are placed uniformly on each booklet. Staple two times, one on each end about two inches from the edge of the paper.

**Saddle Stitcher Troubleshooting**

This device is simple to use and has presented no problem thus far, if a problem arises consult the Operator's Manual. The manuals for all of the items at the Print Station station can be found in the metal drawer under the Print Station table. There are tools and another strike plate that came with the device that we should use to work on the saddle stitcher.

**CDS and Software Assembly**

Place CDs and stickers with those manuals that need them, refer to the attached table to determine what components go with each manual.

Use Flashdrives stocked at print station to load software for sale on drives. Drives will slowly replace our CDs, but for the time being follow work instructions for each product to determine if you use CDs or flash drives.

**USB Software Loading**

First insert the labelled USB Drive for Decagon or Aqualab corresponding to the type of software and Build Instructions Spreadsheet. Log in to M3 – INV.Q and type in the part number 19002. Go to the images tab and click on M319002-USBCreator_Installer.exe. This opens a Window on your Windows Desktop that gives you three options, select software package desired, select desired USB Drive, and then hit Enter. This should execute across the network and begin loading the flashdrive. Once loading is finished, eject the flashdrive by right clicking the drive icon at the bottom left of the screen or from your My Computer drives list.

Next assemble the box. Training is available on this process. In general, you fold the bottom sides of the software box first. You then fold the bottom up and into the center of the box. Fold the wing tip sides and lock them together. Then insert loaded USB Drive into slot and close box case. You can then place the appropriate wrap on the box and adhere it by rolling three sticky dots on the back of the A/B wrap and booklet, pressing the box down and then folding the booklet around the box according to dye folds. At this point you should place the software serial number sticker on the designated location in the wrap. Then roll four or five dots on the flap and close the software box.

We then need to shrink wrap the box and place the barcoded sticker on the exterior of the shrink wrap on the back. Construct these boxes to the safety qty listed in the Build Instructions Spreadsheet.

## Notes:

This guide is not a replacement for the Operator's Manuals for each piece of Print Station equipment. This is a compilation of lessons the MarCom Area learned while developing the Decagon Print Station.

Also keep in mind that you are responsible for maintaining the inventory of supplies and saftey stock of print materials at the print station. The covers are also available at manuals.decagon.com in a folder labeled covers. Print off covers to maintain stock and order those that require out of house production. Keep the supplies up to date and we can print all of the manuals we need every day.

Should our production associates notice a need for more capacity on the printer, there is an additional feeder tray that you can purchase to feed in up to 1,100 sheets. This would speed up printing

time and reduce the time required to reload and adjust paper in the tray.